

Listing of Claims:

1. (Currently Amended) An inverted microscope system comprising:

a microscope main body ~~having~~ comprising:

an objective lens opposed to a sample,

5 a primary image forming optical system which forms an intermediate image of the sample in cooperation with the objective lens, and

10 focusing means for changing a relative distance between the sample and the objective lens and forming the intermediate image of the sample at a predetermined position;

illumination means which is detachable with respect to the microscope main body, for generating illumination light to the sample; and

15 at least one ~~an~~ additional unit which is detachable with respect to the microscope main body and includes an observation tube to observe the intermediate image of the sample,

wherein the microscope main body comprises at least two insertion portions into which at least two additional units are insertable.

2. (Currently Amended) The inverted microscope system according to claim 1, wherein the at least one additional unit

having comprises a relay optical system to relay the intermediate image of the sample to the observation tube.

3. (Currently Amended) The inverted microscope system according to claim 2, wherein the at least one additional unit further comprising comprises an optical element which takes out a part of a beam of the intermediate image of the sample relayed by 5 the relay optical system, and a port to which an image pickup means device is attached, wherein the image pickup means picking device picks up a sample image taken out via the optical element.

4. (Currently Amended) The inverted microscope system according to claim 3, wherein the microscope main body further comprising comprises an optical element which reflects observation light from the sample outgoing from the objective 5 lens in any one of an obliquely upward direction and a horizontal direction, and wherein the intermediate image being is formed on an optical path of the light reflected by the optical element.

Claims 5 and 6 (Canceled).

7. (Currently Amended) The inverted microscope system according to claim 2, wherein the microscope main body comprises an optical element which reflects light from the objective lens in one of an obliquely upward and a substantially

5 horizontal direction. ~~optical element including a first optical element which reflects a beam from the objective lens obliquely upward, and a second optical element which reflects the light in a substantially horizontal direction,~~

10 ~~any one of the first optical element and the second optical element being selectively attached to the microscope main body.~~

Claims 8 and 9 (Canceled).

10. (Currently Amended) The inverted microscope system according to claim 2, wherein the optical element ~~having~~ has a variable reflection angle.

Claims 11 and 12 (Canceled).

13. (Currently Amended) The inverted microscope system according to claim 2 7, wherein the optical element ~~being~~ detachable comprises one of a first optical element which reflects the light from the objective lens obliquely upward, and a second optical element which reflects light in a substantially horizontal direction, and

wherein one of the first optical element and the second optical element is selectively attached to the microscope main body.

Claims 14 and 15 (Canceled).